

WHAT IS CLAIMED IS:

1. A food shaping device for forming a three-layered food comprising:

at least two first guide units which are longitudinally arranged;
5 each guide unit being a tapered cylinder; an interior of each first guide unit having a first screw propeller having blades; a dough entering into the guide unit from an upper end of each first guide unit and then being transferred for being further processed;

at least two guide devices being horizontally arranged; each guide
10 device being below and connected to a respective one of the two first guide units; each guide device including:

a longitudinal first receiving tank; an inner wall of the first receiving tank being formed with a first path; another longitudinal receiving tank being arranged adjacent to the
15 receiving tank; a wall of the second receiving tank being installed with convex strips and concave portions; a guide hole serving to communicate the first receiving tank and the second receiving tank; an upper opening of the receiving tank being communicated to the first guide unit; a dough being guided by
20 the screw propeller to the second receiving tank and then through the guide hole to the first receiving tank;

a turbine pump being horizontally arranged to the first receiving tank so as to form a propeller for changing direction of the dough in the first receiving tank so that the dough in the
25 guide hole is fed into the first path;

a food output unit for outputting a cylindrical food including:

a main tube having a left inlet, a right inlet and a longitudinal through hole;

5 a middle tube having a longitudinal through hole and an lateral inlet; the middle tube being engaged to the longitudinal through hole of the main tube;

an inner tube having a longitudinal through hole and being engaged to the longitudinal through hole of the middle tube;

10 an inner circular path being formed between the inner tube and the middle tube; a cylindrical second guide unit being connected to an upper opening of the inner tube; an inner wall of the inner tube being installed with convex strips and concave portions;

15 an inner material guiding nozzle having a longitudinal inner material guiding holes; the inner material guiding nozzle being firmly secured to a lower opening of the middle tube;

20 an outer material guiding nozzle being a longitudinal outer material guiding hole firmly secured to a lower opening of the longitudinal path of the main tube; an outer circular path being formed between the inner material guiding nozzle and the outer material guiding nozzle;

wherein the second screw propeller has blades; the second screw propeller is pivotally connected to the second guide unit and the longitudinal path of the inner tube; the stuffing is filled into the
25 second guide unit; then the stuffing is pushed to the output end of the

inner tube by the second screw propeller to be as an inner layer material of the cylindrical food;

wherein the dough is fed into the left and right inlets of the main tube from the two first paths; the dough will collide horizontally to the wall of the middle tube; thus the moving direction of the dough is changed to a longitudinal direction so that the dough moves longitudinally in the longitudinal path of the main tube; then the dough passes through the outer circular path to be outputted to be as an outer layer material;

wherein part of the dough horizontally passes through the transversal inlet of the middle tube and collides an outer wall of the inner tube; then the dough is guided by the inner circular path and outputted as a middle layer material; thus a three layers cylindrical food is formed.

2. The food shaping device for forming a three-layered food as claimed in claim 1, wherein the inner wall of the inner tube is formed with a plurality of convex strips and a plurality of concave portions.

3. The food shaping device for forming a three-layered food as claimed in claim 1, further comprising:

a disk seat having a rotary shaft at a center thereof; the disk seat being installed above the inner tube; a guide hole being installed on the disk seat; the guide hole being communicated to the longitudinal path of the inner tube;

a rotary disk with a plurality of material guide holes therein being passed by the rotary shaft; wherein when the rotary disk rotates, one

of the material guide hole will align to one guide hole of the disk seat;
and

an air pressure cylinder being installed above the material guide hole; a piston of the air pressure cylinder entering into the
5 longitudinal path from the material guide hole and the guide hole so as to move between an upper extreme point and a lower extreme point.

4. The food shaping device for forming a three-layered food as claimed in claim 1, further comprising:

10 a cut device being installed below the output device; the cylindrical food entering into a central hole of the cut device; the cut device having a plurality of knives which can seal the central hole so as to cut of the cylindrical food to form a plurality of ball-like foods; the ball-like foods will fall to a transfer belt for being outputted; each
15 ball-like food has the inner layer material, the middle layer material, and the outer layer material.

5. The food shaping device for forming a three-layered food as claimed in claim 1, wherein inner walls of the two guide units are installed with a plurality of line shape concave portions so as to drive
20 the dough to move downwards in the two guide units so that the stuffing moves smoothly.

6. The food shaping device for forming a three-layered food as claimed in claim 1, wherein bottoms of the second receiving tank and first receiving tank have a stepped difference so that the dough in the
25 second receiving tank is transferred to the first receiving tank rapidly.

7. The food shaping device for forming a three-layered food as claimed in claim 1, wherein the stuffing is one of powdered stuffing and particle stuffing.

8. The food shaping device for forming a three-layered food as
5 claimed in claim 1, wherein an angle between the first path and the second receiving tank is between 90 to 130 degrees.